REMARKS

Claims 1-30 are pending, with claims 1, 8, 11, 21, and 28 being independent. Claims 1, 8, 11-16, 21, 23, 24 and 28 have been amended. No new matter has been added. Reconsideration and allowance of the above-referenced application are respectfully requested.

Claims 1, 6-8, 11-16, 18, 21-25 and 27-30 stand rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Haviv (US Publication No. 2002/0059451A1). Claims 4, 5, 9, 10, 17 and 26 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Haviv in view of Speight et al (4th USENIX Windows Systems Symposium Paper 2000, pp.. 113-124 of the Proceedings, August 3-4, 2000). These contentions are respectfully traversed.

Haviv is directed to a system that enables filtered peer-to-peer communication with improved performance and load-balancing and fail-over mechanisms. (See Haviv at ¶ 0013.) The system may be implemented as an efficient multi-channel reliable network having remote direct memory access (RDMA) capabilities. (See Haviv at ¶ 0014.) Moreover, in some cases,

> "it may not be possible to replace the client networking software and/or hardware. In such cases, according to some embodiments of the present invention that will be described with respect to FIG. 4, a proxy element may be added between the router or routers and the client computers. The proxy may collect packets provided by the client (e.g.

> TCP/IP packets) and may generate transactions instead of the client computer. The proxy may also convert the result data back to packets."

(See Haviv at ¶ 0016.)

Independent claim 1 recites, "receiving a packet at a proxy node in a system area network from a first node that generated the packet using a first protocol; translating the packet using a second protocol used by a second node; and sending the translated packet from the proxy node to the second node; wherein the first and second protocols comprise first and second transport-layer, connection-oriented, byte stream based protocols, the proxy node manages first and second endpoints corresponding to the first and second protocols". In addition, claim 1 has been amended to recite, "the translating comprises relaying a byte stream and maintaining byte stream order over the first and second protocols". Support for this amendment can be found throughout the application as filed, and in particular at page 5, lines 11-21, page 15, line 23 to page 16, line 7, and page 21, line 21 to page 22, line 5.

By relaying the byte streams and maintaining byte stream order in the translating, the streaming semantics of the byte stream based protocol are maintained. This maintaining of streaming semantics provides a higher level of transparency for the proxy node. The first node and the second node may believe they are communicating directly with each other and be unaware

of the proxy node. For example, both the network client and the application node can continue to use stream sockets over Transmission Control Protocol/Internet Protocol (TCP/IP) without realizing that a proxy node sits between them doing a protocol translation that maintains the byte stream order over the first and second protocols.

In contrast, Haviv converts packet/frame-oriented communications to "transaction-oriented communications, and/or to implement RDMA operations." (See Haviv at ¶ 0053.) These transaction-oriented communications, as described in Haviv, use a messaging protocol with corresponding messaging semantics. (See Haviv at ¶ 0023-0028, 0045 and 0049.) Thus, any byte stream based communications used in the system of Haviv will not be maintained over the conversion between the first and second protocols (e.g., a TCP/IP byte stream in Haviv will terminate at the proxy node). Thus, independent claim 1 should now be in condition for allowance. Dependent claims 2-7 are patentable for at least the above reasons, and based on their own merits.

Independent claims 11, 21 and 28 include a conditional operation: "if the first packet meets a specified criterion, translating the first packet using a second protocol used by an application node." Haviv never suggests the possibility of the packet conversion being conditional. The portions of Haviv cited in the Official Action (¶ 0053 and 0056) say nothing about

a conditional conversion between protocols. Moreover, in the rejections of claim 12, the Official Action states, "whether or not the data is received from a trusted client is analogous to the criteria". However, Haviv never suggests that protocol conversion may be conditioned on whether or not the received data is from a trusted client.

Independent claims 11, 21 and 28 have been amended to clarify that the conditional translation of a packet is based on a specified criterion that relates to whether a connection has already been established with the network client using the first protocol. Haviv fails to teach or suggest this aspect of the claims. Thus, independent claims 11, 21 and 28 should now be in condition for allowance. Dependent claims 12-20, 22-27, 29 and 30 are patentable for at least the above reasons, and based on their own merits.

Independent claim 8 has been amended to clarify that a response is sent from the proxy node to the first node using the first protocol, if the processing results in a determination that the packet comprises a transport-layer control packet that need not be translated and sent to the second node. (Emphasis added.) This claim is now clearly distinguished over the server cache functionality of the proxy described in Haviv. (See Haviv at ¶ 0058.) Thus, independent claim 8 should now be in condition for allowance. Dependent claims 9 and 10 are

patentable for at least the above reason, and based on their own merits.

Claims 2 and 3 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Haviv in view of Salo et al (US Patent No. 6,609,148). This contention is respectfully traversed.

A prima facie case of obviousness for claims 2 and 3 has not been established for two main reasons. First, no motivation to combine Salo with Haviv has been identified in the references themselves or in the knowledge generally available to one of ordinary skill in the art. (See MPEP 706.02(j); emphasis added). The Official Action merely states that Salo's translation method is advantageous. While this is a motivation to use the techniques of Salo generally, this does not constitute a motivation to make the suggested combination without some other indication that the techniques of Salo are applicable to Haviv.

Second, there is not a reasonable expectation of success for the proposed combination of Salo with Haviv. Salo describes grouping a series of requests to retrieve a particular e-mail's header, time stamp, priority, and body. This is done by a Distributed Component Object Model (DCOM) proxy object 605, which introduces a layer of abstraction between a CDO (Collaboration Data Object) object 604 and an EGS (enterprise

gateway server) 164. (See Salo at col. 14, lines 20-39.) There is absolutely no indication of how this DCOM specific technology could be imported into the multi-channel network having RDMA in Haviv.

Thus, a prima facie case of obvious has not been established. Claims 2 and 3 should be in condition for allowance for at least the above reasons.

Claims 19 and 20 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Haviv in view of Squire et al (US Patent No. 6,745,243). This contention is respectfully traversed.

A prima facie case of obviousness for claims 19 and 20 has not been established. A proper motivation to combine the references has not been identified. There is not a reasonable chance of success for the suggested combination because the load balancing of Squire is very different than the load balancing described in Haviv. Finally, even if the proposed combination could be made, this combination would not teach or suggest all the claim limitations.

Claim 19 defines multiple network nodes in a system area network (SAN) where each network node performs load balancing among the proxy nodes in the system area network based on protocol processing requirements. This load balancing is at the connection level, and load is balanced across proxy nodes that

do transport-layer protocol translation. This is neither taught nor suggested by the art of record.

Additionally, claim 20, which depends from claim 19, defines multi-level, distributed load balancing. The art of record fails to teach or suggest distributed load balancing on multiple levels, a first level being network nodes in a SAN that balance load across proxy nodes in the SAN based on protocol processing requirements, and a second level being the proxy nodes in the SAN that balance load across application nodes in the SAN based on application processing requirements.

Thus, claims 19 and 20 should be in condition for allowance for at least the above reasons.

It is respectfully suggested for all of these reasons, that the current rejection is totally overcome; that none of the cited art teaches or suggests the features which are now claimed, and therefore that all of these claims should be in condition for allowance. A formal notice of allowance is thus respectfully requested.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific issue or comment does not signify agreement with or concession of that issue or comment. Because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed.

Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

No fees are believed due. Please apply any necessary charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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